GZA
GeoEnvironmental, Inc.

Engineers and
Scientists

VIA EMAIL

July 20, 2012
File No. 04.0029307.00

Ms. Amy Daigneault
Pretreatment Coordinator
Lowell Regional Wastewater Utility
451 First St. Blvd. (Rte 110)
Lowell, Massachusetts 01850

Re: Monthly Self Monitoring Report
June 2012
Merrimack Station
Public Service Company of New Hampshire
Bow, New Hampshire

380 Harvey Road
Manchester
New Hampshire
03103-3347
603-623-3600
FAX 603-624-9463
www.gza.com

Dear Ms. Daigneault:

On behalf of Public Service Company of New Hampshire (PSNH), GZA GeoEnvironmental, Inc. (GZA) is pleased to submit the attached Self-Monitoring Report (SMR) for the period June 1, 2012 through June 30, 2012. This SMR is intended to satisfy Conditions 7 and 8 of the Interim Discharge Authorization (IDA) issued to PSNH by the Lowell Regional Wastewater Utility (LRWU), dated March 29, 2012. The analysis of the softened Stream B sample collected on June 14, 2012 was performed in accordance with the United States Environmental Protection Agency (EPA) draft Standard Operating Procedure (SOP) for trace metals analysis of flue gas desulfurization (FGD) wastewater. The SOP is described below.

The attached **SMR Summary Sheet** summarizes the analytical results for all required parameters as outlined in Condition 8 of the IDA. The attached **Table 1** compares the results to the LRWU's Local Sewer Discharge Limits. The results indicate that pollutant concentrations were within the limits. Wastewater flow was approximately 48,000 gallons for the monitoring period and was estimated based on the actual number of tanker trucks sent to LRWU from June 1, 2012 through June 30, 2012 and tanker capacity.

Also included with this monthly report is an analytical data report for a non-contact cooling water sample collected on June 7, 2012, a waste stream which was recently approved by LRWU for discharge under the IDA dated March 29, 2012. This waste stream was not transported to LRWU in the month of June 2012, but the analytical data reports are being provided as a courtesy.

ANALYTICAL DISCUSSION

FGD wastewater requires specialized analytical techniques to overcome matrix interferences for analysis of certain trace metals. To assist you in evaluating this issue further, we offer an excerpt below from the EPA web site and a link to their draft SOP for trace metals analysis of FGD wastewater that contains further guidance.

LABORATORY ANALYSIS OF FGD WASTEWATER

Wastewater from FGD systems can contain constituents known to cause matrix interferences. EPA has observed that, during inductively coupled plasma–mass spectrometry (ICP-MS) analysis of FGD wastewater, certain elements commonly present in the wastewater may cause polyatomic interferences that bias the detection and/or quantization of certain elements of interest. These potential interferences may become significant when measuring trace elements at concentrations in the low parts per billion range.

As part of a recent sampling effort for the steam electric power generating effluent guidelines rulemaking, EPA developed an SOP that was used in conjunction with EPA Method 200.8 to conduct ICP-MS analyses of FGD wastewater. The SOP describes critical technical and quality assurance procedures that were implemented to mitigate anticipated interferences and generate reliable data for FGD wastewater. EPA regulations at 40 CFR 136.6 already allow the analytical community flexibility to modify approved methods to lower the costs of measurements, overcome matrix interferences, or otherwise improve the analysis. The draft SOP developed for FGD wastewater takes a proactive approach toward looking for and taking steps to mitigate matrix interferences, including using specialized interference check solutions (i.e., a synthetic FGD wastewater matrix). EPA's draft SOP is being made available to laboratories contemplating ICP-MS analysis of FGD wastewater, either for adoption as currently written or to serve as a framework for developing their own laboratory-specific SOPs. For further information, see:

- Standard Operating Procedure: Inductively Coupled Plasma/Mass Spectrometry for Trace Element Analysis in Flue Gas Desulfurization Wastewaters (30 pp, 174K), *http://water.epa.gov/scitech/wastetech/guide/upload/steam_draft_sop.pdf*, EPA May 2011.

Considering that specialized analytical techniques are necessary to overcome matrix interference for certain analysis of trace metals in FGD wastewater, we recommend any analysis on FGD wastewater be conducted in accordance with the EPA draft SOP for trace metals analysis of FGD wastewater.

Should you have any questions concerning this report, please do not hesitate to contact me at (603) 232-8744.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Ronald A. Breton

Ronald A. Breton, P.E.
Senior Principal

RAB:tmd

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Attachments: SMR Summary Sheet
Table 1
Analytical Data Reports

SMR SUMMARY SHEET

LOWELL REGIONAL WASTEWATER UTILITY
Industrial Sewer User Self-Monitoring Report Summary Sheet

Facility Information: Company Name Public Service of New Hampshire

Facility Address 97 River Road Bow, New Hampshire Permit No. NA (Interim Discharge Authorization)

Facility Contact Bradley Owens Telephone (603) 224-4081

----------*Use A Separate Summary Sheet For Each Monitoring Point* ----------

Monitoring Report: Monitoring Point End of pretreatment process Submittal Date July 20, 2012

Reporting Period (circle applicable): Baseline Annually Semi-Annually Quarterly (Monthly) Re-Sample

Reporting Period Start Date June 1, 2012 Reporting Period End Date June 30, 2012

Sample Analysis: Certified Analytical Lab Eastern Analytical, Inc. (EAI)

Authorized Rep. Lorraine Olashaw Certification No. 1012

Analytical Sub-Contractor Frontier Global Sciences Certification No. E87575

Sample Collection: Sampler (Lab/Self/Other) Paul Pepler, GZA

Sample Type(s) (circle all that apply): (Grab) Time Composite Flow Composite

Grab Sampling: Sample Date 6/14/2012 Sample Time 12:05 pm

pH (Standard Units) 9.0 Instantaneous Flow Rate (GPM) N/A

Composite Sampling: Start Date/Time N/A Stop Date/Time N/A

No. Aliquots N/A Aliquot Volume N/A Sample Volume N/A

Flow Data: Sampling Interval Volume (Gal) N/A Daily Flow Rate (GPD) 9,600 (Average of discharge days)

Monitoring Period Industrial Wastewater Flow (Gal) Stream A: 0, Stream B: 0 Softened Stream B: 48,000 [ ] Meter [X] Estimate

Monitoring Period Start Date June 1, 2012 Monitoring Period End Date June 30, 2012

Refer to Self-Monitoring Report Instructions for details on completing this SMR Summary Sheet

LOWELL REGIONAL WASTEWATER UTILITY
Industrial Sewer User Self-Monitoring Report Summary Sheet

Submit All Chains of Custody and Laboratory Result Sheets With SMR Summary Sheet

Analytical Results:

Parameter	Analysis Date	Result (mg/L)	Parameter	Analysis Date	Result (mg/L)
BOD			Copper	6/21/2012	0.00595
COD	06/19/2012	160	Cyanide (Total)	6/18/2012	<0.01
O & G 413.1 / 1664			Fluoride		
TSS			Lead	6/21/2012	0.000452
TOC *			Mercury	6/22/2012	0.00000154
TTO ** 624 / 8260B – 625 / 8270			Molybdenum	6/21/2012	0.0896
Aluminum	6/21/2012	0.0884	Nickel	6/21/2012	0.00410
Antimony			Nitrogen (Kjeldahl)		
Arsenic	6/21/2012	0.00123	Phenols (Total)		
Barium			Selenium	6/21/2012	0.00705
Beryllium			Silver	6/21/2012	<0.000100
Cadmium	6/21/2012	0.000132	Thallium		
Chromium (Hexavalent)			Zinc	6/21/2012	0.0243
Chromium (Total)	6/21/2012	0.00092	Other: see Table 1		

BOD = Biochemical Oxygen Demand COD = Chemical Oxygen Demand O & G = Oil & Grease TSS = Total Suspended Solids TTO = Total Toxic Organics
**TOC (Total Organic Carbon) = is the amount of carbon bound in an organic compound and is often used as a non-specific indicator of water quality. TOC measures both the total carbon present as well as the inorganic carbon (IC). Subtracting the inorganic carbon from the total carbon yields TOC.*
***TTO's = Summation of all quantifiable values greater than 0.01 mg/L for toxic organics listed in 40 CFR 413.02(i). TTO's include PCB's (Poly-Chlorinated Biphenyls), VOC's (Volatile Organic Compounds), SVOC's (Semi-Volatile Organic Compounds). PCB's, VOC's and SVOC's shall be analyzed using EPA Methods 608, 624, and 625, respectively.*

Zero Discharge / Self-Monitoring (initial if applicable):

_____ No industrial wastewater from permitted processes has been discharged to sewer during the monitoring period

_____ No sampling has been conducted on permitted sewer discharges during the monitoring period

Certification Statement:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Bradley Owens
Printed Name of Authorized Representative

Signature of Authorized Representative

Station Manager
Title

7/20/2012
Date

TABLE

TABLE 1
SUMMARY OF SOFTENED STREAM B CONCENTRATIONS
COMPARED TO LOWELL SEWER DISCHARGE LIMITS
Public Service Company of New Hampshire
Merrimack Station
Bow, New Hampshire

PARAMETER	LOWELL SEWER DISCHARGE LIMITS (mg/L)	SOFTENED STREAM B RESULTS 6/14/2012 (mg/L)
Aluminum	24.69	0.0884
Arsenic	0.556	0.00123
Cadmium	0.056	0.000132
Chloride	-	320
Chromium (T)	8.108	0.00092
COD	-	160
Copper	3.124	0.00595
Cyanide (T)	1.895	<0.01
Iron	-	0.595
Lead	0.857	0.000452
Manganese	-	0.0699
Mercury	0.004	0.00000154
Molybdenum	-	0.0896
Nickel	1.541	0.00410
pH	5.0-9.5	9.0
Selenium	-	0.00705
Silver	0.053	<0.000100
Zinc	4.959	0.0243

STREAM B ANALYTICAL DATA REPORT

Eastern Analytical, Inc.

professional laboratory & drilling services

Paul Pepler
GZA GeoEnvironmental, Inc. (NH)
380 Harvey Road
Manchester , NH 03103

ACCREDITED IN ACCORDANCE WITH nelac

Subject: Laboratory Report

Eastern Analytical, Inc. ID:	111277
Client Identification:	PSNH-MK
Date Received:	6/14/2012

Dear Mr. Pepler :

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.eailabs.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

Solid samples are reported on a dry weight basis, unless otherwise noted
< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269) and Vermont (VT1012).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw — 7.5.12 — 20

Lorraine Olashaw, Lab Director | Date | # of pages (excluding cover letter)

SAMPLE CONDITIONS PAGE

EAI ID#: **111277**

Client: **GZA GeoEnvironmental, Inc. (NH)**

Client Designation: **PSNH-MK**

Temperature upon receipt (°C): 6 **Received on ice or cold packs (Yes/No): Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
111277.01	Softened Stream B WW	6/14/12	6/14/12	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitibility, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

All results contained in this report relate only to the above listed samples.

References include:

1) EPA 600/4-79-020, 1983

2) Standard Methods for Examination of Water and Wastewater : Inorganics, 19th Edition, 1995; Microbiology, 20th Edition, 1998

3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB

4) Hach Water Analysis Handbook, 2nd edition, 1992

LABORATORY REPORT

EAI ID#: **111277**

Client: **GZA GeoEnvironmental, Inc. (NH)**

Client Designation: **PSNH-MK**

Sample ID:	Softened Stream B WW
Lab Sample ID:	111277.01
Matrix:	aqueous
Date Sampled:	6/14/12
Date Received:	6/14/12

			Analysis			
		Units	**Date**	**Time**	**Method**	**Analyst**
Chloride	**320**	mg/L	6/18/12	12:32	4500CIE	DLS
Cyanide Total	< 0.01	mg/L	6/18/12	10:45	4500CNE	KJR
COD	**160**	mg/L	6/19/12	9:10	H8000	KJR

QC REPORT

EAI ID#: **111277**

Client: **GZA GeoEnvironmental, Inc. (NH)**

Client Designation: **PSNH-MK**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Chloride	< 1	24 (97 %R)	25 (99 %R) (2 RPD)	mg/L		90 - 110	20	4500CIE
Cyanide Total	< 0.01	0.25 (100 %R)		mg/L	6/18/12	85 - 115	20	4500CNE
COD	< 10	89 (89 %R)	110 (108 %R) (19 RPD)	mg/L	6/19/12	85 - 115	20	H8000

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
*/! Flagged analyte recoveries deviated from the QA/QC limits.

FRONTIER
GLOBAL SCIENCES

11720 North Creek Parkway North, Suite 400
Bothell, WA 98011
Ph: 425-686-1996
Fx: 425-686-3096

29 June 2012

Jeff Gagne
Eastern Analytical, Inc
25 Chenell Drive
Concord, NH 03301

RE: Merrimack Station 200.8

Enclosed are the analytical results for samples received by Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Liz Siska

Liz Siska
Project Manager

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11720 North Creek Parkway North, Suite 400
Bothell, WA 98011
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ANALYTICAL REPORT FOR SAMPLES

Laboratory: Frontier Global Sciences, Inc.
SDG:
Client: Eastern Analytical, Inc
Project: Merrimack Station 200.8

Sample ID	Lab ID	Matrix	Date Sampled	Date Received
Softened Stream B WW	1206226-01	Water	14-Jun-12 12:05	15-Jun-12 10:45

Frontier Global Sciences, Inc.

Liz Siska, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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11720 North Creek Parkway North, Suite 400
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CASE NARRATIVE

SAMPLE RECEIPT
Samples were received at Frontier Global Sciences (FGS) on June 15th, 2012. The samples were received intact, on-ice with temperatures measured at 8.2 degrees Celsius.

SAMPLE PREPARATION AND ANALYSIS
Samples were prepared and analyzed for total metals in accordance with EPA Method 200.8 (modified).

Samples were prepared and analyzed for total mercury in accordance with EPA Method 1631E.

ANALYTICAL ISSUES
As an additional measure of the accuracy of the methods utilized for analysis and to check for matrix interference, matrix spikes (MS) and matrix spike duplicates (MSD) were digested and analyzed. All of the matrix spike recoveries were within the control limits with the exception of any QC flagged and described in the notes and definitions section of the following report.

A reasonable measure of the precision of the analytical methods utilized for analysis is the relative percent difference (RPD) between matrix spike and matrix spike duplicate recoveries and between laboratory control sample and laboratory control sample duplicate recoveries. All of the relative percent differences were within the control limits with the exception of any QC flagged and described in the notes and definitions section of the following report.

Frontier Global Sciences, Inc.

Liz Siska, Project Manager

FRONTIER GLOBAL SCIENCES

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Ph: 425-686-1996
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CHAIN OF CUSTODY FORMS

FGS Work Order: 1206226 Sample Receipt Checklist Labeled By: AMB Date: 6/15/12

Client:	Eastern Analytical	Date & Time Received:	6/15/12 1045	Date Logged In:	6/15/12
Project:		Received By:	[illegible]	Logged In By:	AMB
SDG:		# of Coolers Received:	1	FGS PM:	LS

Samples Arrived By: X Shipping Service ___ Courier ___ Hand ___ Other (specify)
Tracking/Airbill Number(s): 1Z5 12 X46 599 01 9744 1211

Cooler Information

	Yes	No	NA	Comments
The coolers do not appear to be tampered with:	X			
Custody seals are present and intact:		X		
Custody seals signed by:			X	

Thermal Preservation: X Loose Ice ___ Gel/Blue Ice ___ None (Ambient) ___ Other (specify)
Thermometer ID: 350 Correction Factor (CF): +0.3 degrees C

Cooler 1:	8.2 °C		Cooler 6:	— °C		Cooler 11:	— °C	
Cooler 2:	— °C		Cooler 7:	— °C		Cooler 12:	— °C	
Cooler 3:	— °C		Cooler 8:	— °C		Cooler 13:	— °C	
Cooler 4:	— °C		Cooler 9:	— °C		Cooler 14:	— °C	
Cooler 5:	— °C		Cooler 10:	— °C		Cooler 15:	— °C	

Chain of Custody
COC is present and includes the following information for each sample:

	Yes	No	NA	Comments
Sample ID/Sample Description:	X			
Date and Time of Sample Collection:	X			
Sampled By:	~~X~~ AMB	X		
Preservation Type:			X	
Requested Analyses:	X			
Required Signatures:	X			
Internal chain of custody required:		X		

Sample Condition/Integrity

	Yes	No	NA	Comments
Sample containers were received intact:	X			
Sample labels are present and legible:	X			
Sample ID on container matches COC:	X			
Correct sample containers used for requested analyses:	X			
Samples received within holding time:	X			
Sample volume sufficient for requested analysis:	X			
Correct preservative used for requested analyses:			X	
pH of samples checked and within method requirements:			X	
If pH adjusted by laboratory, noted in logbook:	X			

Anomalies/Non-conformances:
Ice was completely melted upon receipt. 6/15/12 CD
Only one sample bottle received for both TM and Hg. Bottle used is HDPE. Sample will be nitric preserved then split for Hg and BrCl preserved. AMB 6/15/12
✓ MMO notes. AMB 6/16/12

Client Communication Person Contacted: ________ Date/Time: ________ Method: ________
Discussion/Resolution:

Frontier Global Sciences, Inc.

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Liz Siska

Liz Siska, Project Manager

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Bothell, WA 98011
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CHAIN OF CUSTODY FORMS

1206226

CHAIN-OF-CUSTODY RECORD eastern analytical

professional laboratory services

1206226

EAI SRB# 111277

Sample ID	Date Sampled	Matrix	#Parameters	Sample Notes
Softened Stream B WW1 12:05	6/14/2012	aqueous	Surface Water Low Level Metals	

EAI SRB# 111277 Project State: NH

Project ID: 3902

Company Frontier Global Sciences, Inc.

Address 11720 North Creek Pkwy

Address Bothell, WA,98011 USA

Account #

Phone # 1.425.686.1996

Fax Number 1.425.686.3096

Eastern Analytical, Inc. 25 Chenell Dr. Concord, NH 03301 Phone: (603)228-0525 1-800-287-0525 Fax: (603)228-4591

Results Needed by: Preferred date

QC Deliverables

☒A ☐A+ ☐B ☐B+ ☐C ☐P

Notes about project:

Email pdf of results and invoice to customerservice@eailabs.com.

Al, As, Ag, Cd, Cr, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Zn by Method 200.8 Mod (ICP-MS Collision Cell)

Eastern Analytical Inc. PO Number: 39026

Please call prior to analyzing, if RUSH surcharges will be applied.

Samples Collected by:

Relinquished by	Date/Time	Received by

Relinquished by	Date/Time	Received by

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Frontier Global Sciences, Inc.

Liz Siska

Liz Siska, Project Manager

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ANALYTICAL RESULTS

Softened Stream B WW

Matrix: Water **Laboratory ID:** 1206226-01

Analyte	Result	MDL	MRL	Units	Dilution	Batch	Sequence	Analyzed	Method	Notes
Aluminum	**88.4**	2.2	20.0	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Arsenic	**1.23**	0.26	0.75	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Cadmium	**0.132**	0.021	0.100	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Chromium	**0.92**	0.04	0.50	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Copper	**5.95**	0.05	0.50	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Iron	**595**	6.5	50.0	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Lead	**0.452**	0.020	0.200	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Manganese	**69.9**	0.04	0.50	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Mercury	**1.54**	0.17	1.01	ng/L	2	F206277	2F22007	06/22/12	EPA 1631E	FB-1631
Molybdenum	**89.6**	0.03	0.30	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Nickel	**4.10**	0.04	0.50	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Selenium	**7.05**	0.97	3.00	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	
Silver	ND	0.030	0.100	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	U
Zinc	**24.3**	0.16	2.00	µg/L	5	F206214	2F21012	06/21/12	EPA 200.8 Mod	

Frontier Global Sciences, Inc.

Liz Siska

Liz Siska, Project Manager

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MATRIX DUPLICATES/TRIPLICATES

SOURCE: 1206224-02

Batch: F206277 **Sequence:** 2F22007

Preparation: BrCl Oxidation **Lab Number:** F206277-DUP1

Analyte	Sample Concentration ng/L	Duplicate Concentration ng/L	MRL	% RPD	RPD Limit	Method	Notes
Mercury	50.25	49.53	5.05	1.43	24	EPA 1631E	

Frontier Global Sciences, Inc.

Liz Siska

Liz Siska, Project Manager

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1206226-01

Batch: F206214 **Sequence:** 2F21012

Preparation: Closed Vessel Nitric Oven Digestion **Lab Number:** F206214-MS/MSD1

Analyte	Sample Concentration (µg/L)	Spike Added (µg/L)	MS Concentration (µg/L)	MS % Recovery	Recovery Limits	Method	Notes
Aluminum	88.4	151.50	215.8	84.1	70 - 130	EPA 200.8 Mod	
Chromium	0.92	7.0700	7.98	99.9	70 - 130	EPA 200.8 Mod	
Manganese	69.90	6.0600	74.73	79.6	70 - 130	EPA 200.8 Mod	
Iron	594.8	505.00	1093	98.7	70 - 130	EPA 200.8 Mod	
Nickel	4.10	4.0400	8.05	97.8	70 - 130	EPA 200.8 Mod	
Copper	5.95	4.0400	9.70	92.8	70 - 130	EPA 200.8 Mod	
Zinc	24.30	10.100	34.00	96.0	70 - 130	EPA 200.8 Mod	
Arsenic	1.23	15.150	17.10	105	70 - 130	EPA 200.8 Mod	
Selenium	7.05	30.300	41.53	114	70 - 130	EPA 200.8 Mod	
Molybdenum	89.55	2.0200	89.68	6.45	70 - 130	EPA 200.8 Mod	QM-02
Silver	ND	1.5150	1.395	92.1	70 - 130	EPA 200.8 Mod	
Cadmium	0.132	0.80800	0.960	102	70 - 130	EPA 200.8 Mod	
Lead	0.452	1.5150	1.981	101	70 - 130	EPA 200.8 Mod	

Analyte	Spike Added (µg/L)	MSD Concentration (µg/L)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Aluminum	151.50	224.0	89.5	3.72	70 - 130	20	EPA 200.8 Mod	
Chromium	7.0700	7.79	97.2	2.39	70 - 130	20	EPA 200.8 Mod	
Manganese	6.0600	73.99	67.4	1.00	70 - 130	20	EPA 200.8 Mod	QM-02
Iron	505.00	1043	88.7	4.75	70 - 130	20	EPA 200.8 Mod	
Nickel	4.0400	7.89	94.0	1.94	70 - 130	20	EPA 200.8 Mod	
Copper	4.0400	9.55	89.1	1.54	70 - 130	20	EPA 200.8 Mod	
Zinc	10.100	33.10	87.1	2.69	70 - 130	20	EPA 200.8 Mod	
Arsenic	15.150	16.89	103	1.25	70 - 130	20	EPA 200.8 Mod	
Selenium	30.300	36.92	98.6	11.8	70 - 130	20	EPA 200.8 Mod	
Molybdenum	2.0200	88.82	-36.2	0.965	70 - 130	20	EPA 200.8 Mod	QM-02
Silver	1.5150	1.403	92.6	0.621	70 - 130	20	EPA 200.8 Mod	
Cadmium	0.80800	0.936	99.5	2.49	70 - 130	20	EPA 200.8 Mod	
Lead	1.5150	1.979	101	0.117	70 - 130	20	EPA 200.8 Mod	

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Liz Siska, Project Manager

FRONTIER GLOBAL SCIENCES

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Bothell, WA 98011
Ph: 425-686-1996
Fx: 425-686-3096

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1206226-01

Batch: F206214 **Sequence:** 2F21012

Preparation: Closed Vessel Nitric Oven Digestion **Lab Number:** F206214-MS/MSD2

Analyte	Sample Concentration (µg/L)	Spike Added (µg/L)	MS Concentration (µg/L)	MS % Recovery	Recovery Limits	Method	Notes
Aluminum	88.4	1010.0	1032	93.4	70 - 130	EPA 200.8 Mod	AS
Chromium	0.92	101.00	97.31	95.4	70 - 130	EPA 200.8 Mod	AS
Manganese	69.90	101.00	166.3	95.5	70 - 130	EPA 200.8 Mod	AS
Iron	594.8	505.00	1066	93.4	70 - 130	EPA 200.8 Mod	AS
Nickel	4.10	126.25	123.4	94.5	70 - 130	EPA 200.8 Mod	AS
Copper	5.95	126.25	122.7	92.5	70 - 130	EPA 200.8 Mod	AS
Zinc	24.30	252.50	257.7	92.4	70 - 130	EPA 200.8 Mod	AS
Arsenic	1.23	101.00	104.3	102	70 - 130	EPA 200.8 Mod	AS
Selenium	7.05	101.00	110.0	102	70 - 130	EPA 200.8 Mod	AS
Molybdenum	89.55	50.500	136.3	92.5	70 - 130	EPA 200.8 Mod	AS
Silver	ND	5.0500	4.534	89.8	70 - 130	EPA 200.8 Mod	AS
Cadmium	0.132	10.100	9.710	94.8	70 - 130	EPA 200.8 Mod	AS
Lead	0.452	25.250	24.97	97.1	70 - 130	EPA 200.8 Mod	AS

Analyte	Spike Added (µg/L)	MSD Concentration (µg/L)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Aluminum	1010.0	1024	92.6	0.789	70 - 130	20	EPA 200.8 Mod	AS
Chromium	101.00	96.05	94.2	1.30	70 - 130	20	EPA 200.8 Mod	AS
Manganese	101.00	163.7	92.8	1.62	70 - 130	20	EPA 200.8 Mod	AS
Iron	505.00	1050	90.1	1.58	70 - 130	20	EPA 200.8 Mod	AS
Nickel	126.25	121.0	92.6	1.96	70 - 130	20	EPA 200.8 Mod	AS
Copper	126.25	120.5	90.7	1.83	70 - 130	20	EPA 200.8 Mod	AS
Zinc	252.50	254.4	91.1	1.28	70 - 130	20	EPA 200.8 Mod	AS
Arsenic	101.00	102.2	100	2.02	70 - 130	20	EPA 200.8 Mod	AS
Selenium	101.00	108.2	100	1.64	70 - 130	20	EPA 200.8 Mod	AS
Molybdenum	50.500	135.3	90.5	0.744	70 - 130	20	EPA 200.8 Mod	AS
Silver	5.0500	4.492	88.9	0.947	70 - 130	20	EPA 200.8 Mod	AS
Cadmium	10.100	9.752	95.2	0.431	70 - 130	20	EPA 200.8 Mod	AS
Lead	25.250	24.98	97.1	0.0287	70 - 130	20	EPA 200.8 Mod	AS

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1206224-02

Batch: F206277 **Sequence:** 2F22007

Preparation: BrCl Oxidation **Lab Number:** F206277-MS/MSD1

Analyte	Sample Concentration (ng/L)	Spike Added (ng/L)	MS Concentration (ng/L)	MS % Recovery	Recovery Limits	Method	Notes
Mercury	50.25	204.00	235.6	90.9	71 - 125	EPA 1631E	

Analyte	Spike Added (ng/L)	MSD Concentration (ng/L)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Mercury	204.00	224.5	85.4	4.80	71 - 125	24	EPA 1631E	

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Liz Siska, Project Manager

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1206318-04

Batch: F206277 **Sequence:** 2F22007

Preparation: BrCl Oxidation **Lab Number:** F206277-MS/MSD2

Analyte	Sample Concentration (ng/L)	Spike Added (ng/L)	MS Concentration (ng/L)	MS % Recovery	Recovery Limits	Method	Notes
Mercury	2.23	5.0000	6.74	90.1	71 - 125	EPA 1631E	

Analyte	Spike Added (ng/L)	MSD Concentration (ng/L)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Mercury	5.0000	6.67	88.8	0.975	71 - 125	24	EPA 1631E	

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LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

RECOVERY AND RPD

Batch: F206214 **Sequence:** 2F21012

Preparation: Closed Vessel Nitric Oven Digestion **Lab Number:** F206214-BS/BSD1

LCS Source: Blank Spike

Analyte	Spike Added (µg/L)	LCS Concentration (µg/L)	LCS % Recovery	Recovery Limits	Method	Notes
Aluminum	150.00	137.3	91.5	85 - 115	EPA 200.8 Mod	
Chromium	7.0000	6.47	92.5	85 - 115	EPA 200.8 Mod	
Manganese	6.0000	5.76	96.1	85 - 115	EPA 200.8 Mod	
Iron	500.00	470.6	94.1	85 - 115	EPA 200.8 Mod	
Nickel	4.0000	3.93	98.2	85 - 115	EPA 200.8 Mod	
Copper	4.0000	4.03	101	85 - 115	EPA 200.8 Mod	
Zinc	10.000	9.96	99.6	85 - 115	EPA 200.8 Mod	
Arsenic	15.000	14.14	94.3	85 - 115	EPA 200.8 Mod	
Selenium	30.000	29.45	98.2	85 - 115	EPA 200.8 Mod	
Molybdenum	2.0000	1.83	91.7	85 - 115	EPA 200.8 Mod	
Silver	1.5000	1.483	98.9	85 - 115	EPA 200.8 Mod	
Cadmium	0.80000	0.822	103	85 - 113	EPA 200.8 Mod	
Lead	1.5000	1.585	106	85 - 115	EPA 200.8 Mod	

Analyte	Spike Added (µg/L)	LCSD Concentration (µg/L)	LCSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Aluminum	150.00	142.6	95.1	3.82	85 - 115	20	EPA 200.8 Mod	
Chromium	7.0000	6.41	91.6	0.979	85 - 115	20	EPA 200.8 Mod	
Manganese	6.0000	5.75	95.9	0.209	85 - 115	20	EPA 200.8 Mod	
Iron	500.00	465.3	93.1	1.14	85 - 115	20	EPA 200.8 Mod	
Nickel	4.0000	3.88	97.1	1.12	85 - 115	20	EPA 200.8 Mod	
Copper	4.0000	4.01	100	0.620	85 - 115	20	EPA 200.8 Mod	
Zinc	10.000	9.83	98.3	1.37	85 - 115	20	EPA 200.8 Mod	
Arsenic	15.000	14.33	95.5	1.33	85 - 115	20	EPA 200.8 Mod	
Selenium	30.000	29.96	99.9	1.71	85 - 115	20	EPA 200.8 Mod	
Molybdenum	2.0000	1.82	90.9	0.946	85 - 115	20	EPA 200.8 Mod	
Silver	1.5000	1.457	97.1	1.77	85 - 115	20	EPA 200.8 Mod	
Cadmium	0.80000	0.804	101	2.10	85 - 113	20	EPA 200.8 Mod	
Lead	1.5000	1.561	104	1.57	85 - 115	20	EPA 200.8 Mod	

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Liz Siska

Liz Siska, Project Manager

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LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

RECOVERY AND RPD

Batch: F206277
Preparation: BrCl Oxidation
Sequence: 2F22007
Lab Number: F206277-BS/BSD1
LCS Source: LCS

Analyte	Spike Added (ng/L)	LCS Concentration (ng/L)	LCS % Recovery	Recovery Limits	Method	Notes
Mercury	15.679	14.52	92.6	80 - 120	EPA 1631E	

Analyte	Spike Added (ng/L)	LCSD Concentration (ng/L)	LCSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Mercury	15.679	14.71	93.8	1.32	80 - 120	24	EPA 1631E	

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Ph: 425-686-1996
Fx: 425-686-3096

PREPARATION BLANKS

Instrument: ICPMS-6

Sequence: 2F21012

Preparation: Closed Vessel Nitric Oven Digestion

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F206214-BLK1	Aluminum	0.2	4.0	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Chromium	-0.009	0.10	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Manganese	0.004	0.10	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Iron	0.1	10.0	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Nickel	0.003	0.10	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Copper	0.004	0.10	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Zinc	0.004	0.40	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Arsenic	-0.06	0.15	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Selenium	-0.11	0.60	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Molybdenum	0.0002	0.06	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Silver	-0.0003	0.020	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Cadmium	-0.0006	0.020	µg/L	F206214	EPA 200.8 Mod	U
F206214-BLK1	Lead	0.00003	0.040	µg/L	F206214	EPA 200.8 Mod	U

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Liz Siska, Project Manager

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Ph: 425-686-1996
Fx: 425-686-3096

PREPARATION BLANKS

Instrument: Hg2600-1

Sequence: 2F22007

Preparation: BrCl Oxidation

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F206277-BLK1	Mercury	0.003	0.50	ng/L	F206277	EPA 1631E	U
F206277-BLK2	Mercury	0.006	0.50	ng/L	F206277	EPA 1631E	U
F206277-BLK3	Mercury	0.005	0.50	ng/L	F206277	EPA 1631E	U
F206277-BLK4	Mercury	0.02	0.50	ng/L	F206277	EPA 1631E	QB-04, U
F206277-BLK5	Mercury	0.02	0.50	ng/L	F206277	EPA 1631E	U
F206277-BLK6	Mercury	2.22	9.90	ng/L	F206277	EPA 1631E	QB-08, U

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Notes and Definitions

U	Analyte included in the analysis, but not detected
QM-02	The MS and/or MSD recoveries outside acceptance limits, due to spike concentration less than 1 times the sample concentration. The batch was accepted based on LCS and LCSD recoveries within control limits and, when analysis permits, acceptable AS/ASD.
QB-08	The blank was preserved to 100% BrCl rather than 1%. The control limit for blanks preserved to greater than 1% BrCl is the preservation percentage multiplied by the MRL.
QB-04	The blank was preserved to 2% BrCl rather than 1%. The control limit for blanks preserved to greater than 1% BrCl is the preservation percentage multiplied by the MRL.
FB-1631	Required equipment/field/filter blank not submitted by the client. The sample has been analyzed according to 1631E, but does not meet 1631E criteria
AS	This MS and/or MSD is an analytical spike and/or an analytical spike duplicate.
DET	Analyte Detected
MDL	Minimum Detection Limit
MRL	Minimum Reporting Limit
ND	Analyte Not Detected at or above the reporting limit
wet	Sample results reported on a wet weight basis
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
RSD	Relative Standard Deviation

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Liz Siska

Liz Siska, Project Manager

Chain-of-Custody Record

111277

Bold Fields Required. Please Circle Requested Analysis.

Sample I.D.	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	VOC: 524.2 / 524.2 BTEX / 524.2 MTBE only	VOC: 8260B 624 VTICs / 1,4 Dioxane EDB DBCP	VOC: 8021B BTEX Halos	VOC: 8015B GRO MEGRO MAVPH	SVOC: 8270D 625 SVTICs / ABN A BN PAH	SVOC: TPH8100 L1 L2	SVOC: 8015B DRO MEDRO MAEPH	SVOC: PEST 608 PCB 608 / PEST 8081A PCB 8082	SVOC: Oil & Grease 1664 TPH 1664	TCLP: TCLP 1311 ABN Metals / VOC Pest Herb	Metals: Dissolved Metals (list below)	Metals: Total Metals (list below)	Inorganics: TS TSS TDS Spec. Con.	Inorganics: Br (Cl) F SO_4 / NO_2 NO_3 NO_3NO_2	Inorganics: BOD CBOD T. Alk.	Inorganics: TKN NH_3 T. Phos. O. Phos.	Inorganics: pH T. Res. Chlorine	Inorganics: (COD) Phenols TOC DOC	Inorganics: (Total Cyanide) Total Sulfide	Inorganics: Reactive Cyanide Reactive Sulfide / Flashpoint Ignitability	Micro: Total Coliform E. Coli / Fecal Coliform	Micro: Enterococci / Heterotrophic Plate Count	Other: ~~Total Sulfide~~ (EAI)	Other	Other	# of Containers	Notes MeOH Vial #
Softened Stream B WW	06/14/2012: 12:05	X	X												X		X				X	X				*			4	

Matrix: A-Air; S-Soil; GW-Ground Water; SW-Surface Water; DW-Drinking Water; WW-Waste Water
Preservative: H-HCl; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MeOH

Project Manager: Paul Pepler
Company: GZA GeoEnvironmental, Inc.
Address: 380 Harvey Road
City: Manchester State: NH Zip: 03103
Phone: 603-232-8717 Ext.:
Fax:
E-Mail: paul.pepler@gza.com
Site Name: PSNH- MK
Project #:
State: (NH) MA ME VT Other:
Regulatory Program: NPDES: RGP POTW Stormwater or GWP, Oil Fund, Brownfield or Other:
Quote #: PO #:

Date Needed: Standard TAT

Temp. 6 °C
Ice? (Yes) No

Field pH: 9.05

QA/QC Reporting Level
A B C
or
Presumptive Certainty

Reporting Options
Prelims: (Yes) or No
If Yes: Fax or PDF

Electronic Options
No Fax E-Mail (PDF) Equis

Sampler(s): Paul Pepler, GZA

Relinquished By:	Date:	Time:	Received By:
[signature]	6/14/12	12:35 pm	[signature]

Metals: 8 RCRA 13 PP Fe, Mn Pb, Cu
Other Metals:
Dissolved Metals Field Filtered? Yes No
Notes: (ie: Special Detection Limits, Billing Info, If Different)
Al, As, Ag, Cd, Cr, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, and Zn

Please send metals to Frontier for analysis by Method 200.8 MOD (ICP-MS with Collision cell)

*AOB 6/29/12
~~*Total Sulfide analysis by EAI requested 6/27/12~~ P Pepler

Site History:
Suspected Contamination:
Field Readings:

eastern analytical, inc. professional laboratory services 25 Chenell Drive | Concord, NH 03301 | Tel: 603.228.0525 | 1.800.287.0525 | Fax: 603.228.4591 | E-Mail: customer_service@eailabs.com | www.eailabs.com

(White: Original Green: Project Manager)

NON-CONTACT COOLING WATER ANALYTICAL DATA REPORT

Eastern Analytical, Inc.

Professional laboratory & drilling services

Paul Pepler
GZA GeoEnvironmental, Inc. (NH)
380 Harvey Road
Manchester , NH 03103

ACCREDITED IN ACCORDANCE WITH nelac

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 111126
Client Identification: PSNH-MK
Date Received: 6/8/2012

Dear Mr. Pepler :

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.eailabs.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

Solid samples are reported on a dry weight basis, unless otherwise noted
< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269) and Vermont (VT1012).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director | 6.15.12 Date | 4 # of pages (excluding cover letter)

SAMPLE CONDITIONS PAGE

EAI ID#: **111126**

Client: **GZA GeoEnvironmental, Inc. (NH)**

Client Designation: **PSNH-MK**

Temperature upon receipt (°C): 5

Received on ice or cold packs (Yes/No): Y

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
111126.01	Non-contact Cooling Water	6/8/12	6/7/12	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitibility, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

All results contained in this report relate only to the above listed samples.

References include:

1) EPA 600/4-79-020, 1983

2) Standard Methods for Examination of Water and Wastewater : Inorganics, 19th Edition, 1995; Microbiology, 20th Edition, 1998

3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB

4) Hach Water Analysis Handbook, 2nd edition, 1992

LABORATORY REPORT

EAI ID#: **111126**

Client: **GZA GeoEnvironmental, Inc. (NH)**

Client Designation: **PSNH-MK**

Sample ID:	Non-contact Cooling Water
Lab Sample ID:	111126.01
Matrix:	aqueous
Date Sampled:	6/7/12
Date Received:	6/8/12

		Analytical Matrix	Units	Date of Analysis	Method	Analyst
Aluminum	< 0.05	AqTot	mg/L	6/11/12	200.8	DS
Arsenic	**0.003**	AqTot	mg/L	6/11/12	200.8	DS
Boron	**7.8**	AqTot	mg/L	6/13/12	200.8	DS
Manganese	**0.019**	AqTot	mg/L	6/11/12	200.8	DS
Mercury	< 0.0001	AqTot	mg/L	6/11/12	200.8	DS
Molybdenum	**0.10**	AqTot	mg/L	6/11/12	200.8	DS
Selenium	**0.007**	AqTot	mg/L	6/11/12	200.8	DS

QC REPORT

EAI ID#: **111126**

Client: **GZA GeoEnvironmental, Inc. (NH)**

Client Designation: **PSNH-MK**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Aluminum	< 0.05	11 (101 %R)		mg/L	6/11/12	85 - 115	20	200.8
Arsenic	< 0.001	0.97 (97 %R)		mg/L	6/11/12	85 - 115	20	200.8
Boron	< 0.05	1.1 (112 %R)		mg/L	6/11/12	85 - 115	20	200.8
Manganese	< 0.005	1.0 (104 %R)		mg/L	6/11/12	85 - 115	20	200.8
Mercury	< 0.0001	0.0010 (103 %R)		mg/L	6/11/12	85 - 115	20	200.8
Molybdenum	< 0.001	1.0 (103 %R)		mg/L	6/11/12	85 - 115	20	200.8
Selenium	< 0.001	0.95 (95 %R)		mg/L	6/11/12	85 - 115	20	200.8

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Units	Date of Analysis	Limits	RPD	Method
Aluminum	111083.02	0.17	11 (95 %R)	11 (97 %R) (2 RPD)	mg/L	6/11/12	70-130	20	200.8
Arsenic	111083.02	< 0.001	0.98 (98 %R)	0.98 (98 %R) (0 RPD)	mg/L	6/11/12	70-130	20	200.8
Boron	111083.02	0.13	1.2 (106 %R)	1.2 (107 %R) (1 RPD)	mg/L	6/11/12	70-130	20	200.8
Manganese	111083.02	< 0.005	0.95 (95 %R)	0.96 (96 %R) (1 RPD)	mg/L	6/11/12	70-130	20	200.8
Mercury	111083.02	< 0.0001	0.0011 (105 %	0.0011 (104 %R) (1	mg/L	6/11/12	70-130	20	200.8
Molybdenum	111083.02	< 0.001	1.1 (105 %R)	1.1 (105 %R) (0 RPD)	mg/L	6/11/12	70-130	20	200.8
Selenium	111083.02	< 0.001	0.94 (94 %R)	0.92 (92 %R) (2 RPD)	mg/L	6/11/12	70-130	20	200.8

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
*/! Flagged analyte recoveries deviated from the QA/QC limits.

CHAIN-OF-CUSTODY RECORD

111126

4

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

Sample I.D.	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	VOC: 524.2 / 524.2 BTEX / 524.2 MTBE only	VOC: 8260B 624 VTICs / 1,4 Dioxane EDB DBCP	VOC: 8021B BTEX HALOS	VOC: 8015B GRO MEGRO MAVPH	SVOC: 8270D 625 SVTICs / ABN A BN PAH	SVOC: TPH8100 L1 L2	SVOC: 8015B DRO MEDRO MAEPH	SVOC: PEST 608 PCB 608 / PEST 8081A PCB 8082	SVOC: Oil & Grease 1664 TPH 1664	TCLP: TCLP 1311 ABN Metals / VOC Pest Herb	Metals: Dissolved Metals (list below)	Metals: Total Metals (list below)	Inorganics: TS TSS TDS Spec. Con.	Inorganics: Br Cl F SO_4 / NO_2 NO_3 NO_3NO_2	Inorganics: BOD CBOD T. Alk.	Inorganics: TKN NH_3 T. Phos. O. Phos.	Inorganics: pH T. Res. Chlorine	Inorganics: COD Phenols TOC DOC	Inorganics: Total Cyanide Total Sulfide	Inorganics: Reactive Cyanide Reactive Sulfide / Flashpoint Ignitability	Micro: Total Coliform E. Coli / Fecal Coliform	Micro: Enterococci / Heterotrophic Plate Count	Other	Other	Other	# of Containers	Notes MeOH Vial #
Non-contact cooling water	10:15 06/07/2012	X	X												X					[mark]									1	

MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER; WW-WASTE WATER
PRESERVATIVE: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH

PROJECT MANAGER: Paul Pepler
COMPANY: GZA GeoEnvironmental, Inc.
ADDRESS: 380 Harvey Road
CITY: Manchester STATE: NH ZIP: 03103
PHONE: 603-232-8717 EXT.:
FAX:
E-MAIL: paul.pepler@gza.com
SITE NAME: PSNH- MK
PROJECT #:
STATE: (NH) MA ME VT OTHER:
REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:
QUOTE #: PO #: 02265345

DATE NEEDED: Standard TAT

TEMP. 5 °C
ICE? (YES) NO

QA/QC
REPORTING LEVEL
A B C
OR
PRESUMPTIVE CERTAINTY

REPORTING OPTIONS
PRELIMS: (YES) OR NO
IF YES: FAX OR PDF

ELECTRONIC OPTIONS
NO FAX E-MAIL (PDF) EQUIS

SAMPLER(S): Ken Kroh
RELINQUISHED BY: Ken Kroh DATE: 6/7/12 TIME: 12:39 RECEIVED BY: [signature]
RELINQUISHED BY: [signature] DATE: 6/8/12 TIME: 13:10 RECEIVED BY: [signature]
RELINQUISHED BY: DATE: TIME: RECEIVED BY:

METALS: 8 RCRA 13 PP Fe, Mn Pb, Cu
OTHER METALS:
DISSOLVED METALS FIELD FILTERED? YES NO
NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)
Al, As, B, Mn, Hg, Mo, Se,
Sample pH - 8.8 su

SITE HISTORY:
SUSPECTED CONTAMINATION:
FIELD READINGS:

eastern analytical, inc. *professional laboratory services* 25 Chenell Drive | Concord, NH 03301 | Tel: 603.228.0525 | 1.800.287.0525 | Fax: 603.228.4591 | E-Mail: customer_service@eailabs.com | www.eailabs.com

(WHITE: ORIGINAL GREEN: PROJECT MANAGER)